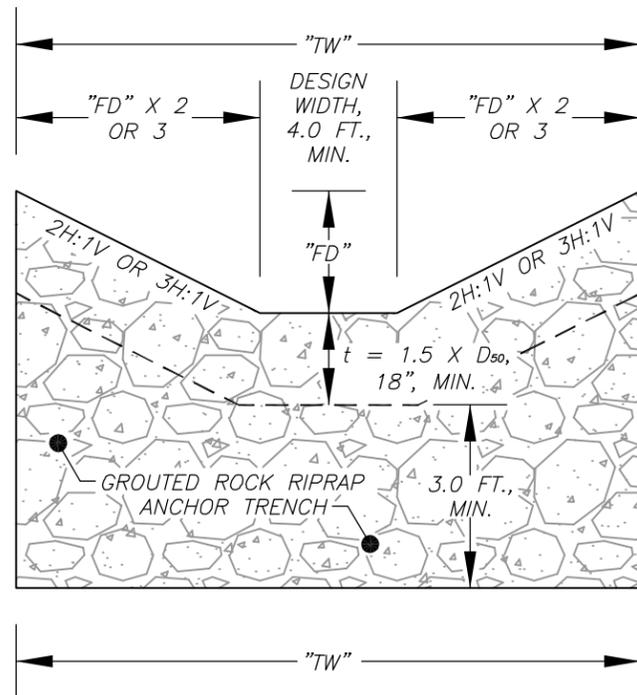


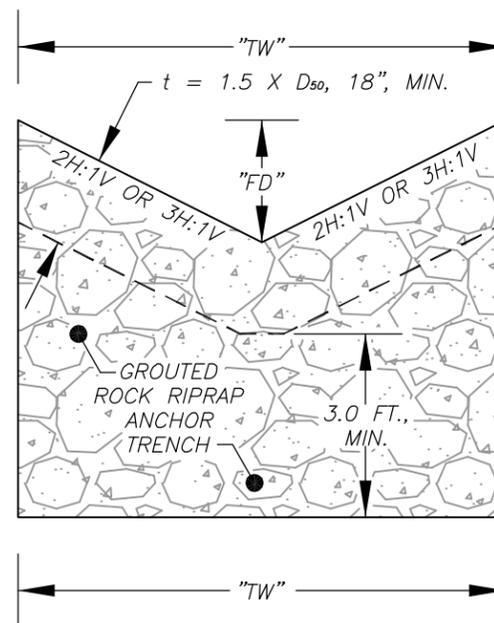
PROFILE

SCALE: 1" = 3 FT.



"FLAT BOTTOM" DITCH CROSS SECTION A. - A.

SCALE: 1" = 3 FT.



"VEE" DITCH CROSS SECTION A. - A.

SCALE: 1" = 3 FT.

**DETAIL XX
GROUT ANCHOR**

SCALE: AS NOTED

ROCK RIPRAP SIZING				
GRADATION	D ₅₀ =6"	D ₅₀ =12"	D ₅₀ =18"	D ₅₀ =24"
50%	6" - 9"	12" - 18"	18" - 27"	24" - 36"
35%	3" - 6"	6" - 12"	9" - 18"	12" - 24"
15%	<= 3"	3" - 6"	4.5" - 9"	6" - 12"

NOTES:

1. EXTEND GROUT ANCHOR Laterally the full width of the channel as shown in the cross section views.
2. INSTALL GROUT ANCHOR at the junction of channel flow slopes with a downstream gradient exceeding 25% as shown in the profile view.
3. AFTER EXCAVATING the grout anchor to the dimensions shown, PLACE GROUT in the excavation to the channel sub grade prior to placing the riprap.
4. "TW" = TOP WIDTH
 "Fb" = FREEBOARD DEPTH
 "F.D." = FLOW DEPTH
 "t" = THICKNESS